

PARTICLE COUNTING WITH
ENHANCED PARTICLE FLUX RANGE

ABSTRACT OF THE DISCLOSURE

A system and method for suppressing secondary electron counts in systems that count particles. The secondary electrons are produced in a foil or other secondary electron emitting surface. A suppression grid is placed in front of the particle detector. The grid is held at an applied voltage that prevents some portion of the electrons from being transmitted through the grid and reaching the detector. The applied voltage may be adjusted and varied in a manner that provides a predictable electron count and an enhanced dynamic range of measurements at the detector.